The TASER M26 in Operation Iraqi Freedom

By Lieutenant Colonel Bo Barbour (Retired)

Operation Iraqi Freedom has seen the introduction of many new weapon systems into the Army inventory. None has been more revolutionary to the Military Police Corps than the TASER® M26.

The TASER M26 is an electromuscular disruptor weapon developed by Tom and Rich Smith of TASER International and marketed for law enforcement use. The Smith brothers originally conceived the idea when their mother needed a self-defense weapon but refused to use a lethal handgun. The TASER M26 is currently used in more than 200 domestic and foreign law enforcement agencies and has been effective in producing reversible incapacitation in 93 percent of incidents.

Operation

The TASER M26 functions by introducing 50,000 volts of electrical energy to the body and overriding the brain waves that control muscles. The complete operating cycle of the TASER M26 begins with the release of the ambidextrous safety. This prepares the weapon to fire by activating the laseraiming system, which places a laser dot on the impact point of the top barb in the air cartridge. The TASER M26 is aimed using the laser pointer; a blade-and-notch sight atop the weapon is used as the backup. The safety release also sets the electronic trigger. When it is pulled, it activates a microprocessor and transformer that elevates the stored electrical power of eight nickel-metal hydride AA batteries into 50,000 volts of electricity, modulated to 26 watts. Simultaneously, a cartridge—with two chambers containing compressed nitrogen behind two projectiles tipped with No. 8 fishhook barbs is activated. These cartridges are tethered to the pistol by insulated wire extending 21 feet. The projectiles angle 8 degrees from each other, spreading a foot for every 7 feet traveled. This spread is required to ensure conduction of the highvoltage electrical charge across large muscle



The TASER M26: "Lightning in the hand"

groups—optimally the muscle groups of the chest, back, and legs.

Effects on the Human Body

When the projectiles strike the barbs and enter the body, they make a 1/4-inch indentation and deliver 26 watts of pulsing electrical energy directly to the muscles and central nervous system, interrupting the brain waves that control movement. This can occur even when the subject is hit in the clothing, as long as the clothing has skin contact. This is the basis for the term "conducted-energy weapon." This process continues for 5 seconds once the trigger is pulled, producing complete but temporary incapacitation. This process is not fatal because the amperage produced by the weapon (0.168) is only 1/100 of that produced by a defibrillator, commonly used to restart the electrical waves of the heart. The sensation of being shot is that of intense burning pain, accompanied by the conscious sensation of panic as the brain realizes it can no longer force the voluntary functions of the body to work. This sensation increases as the brain loses cognitive time awareness—in the course of a 5second cycle—with each pull of the trigger. The immediate aftereffect is the sense of having awoken in the morning—with a groggy awareness of surroundings—but dissipates after a minute. The TASER M26 has proven effective with the most belligerent subjects and those who are intoxicated or under the influence of drugs. Even the most aggressive subjects have rarely taken more than two cycles before surrendering. The effect on the conscious mind after a cycle is immediate compliance to prevent the interruption of muscle function (the Pavlovian response to pain). To date, no death has been directly attributed to the effects of the TASER M26 (when used within the guidelines of instructor training).

Additionally, independent testing has validated that the probes of the TASER M26, when attached to blasting caps and electrical firing systems, will not activate explosives. It has also been proven safe for use inside heavily instrumented and

computerized aircraft cockpits, causing no electrical malfunctions to sensitive avionics.

Operation Iraqi Freedom

The effectiveness of the TASER M26 has been known to the Military Police Corps since its development in 1999, but no valid requirement had emerged from field experience to immediately warrant fielding. When Operation Iraqi Freedom was launched in March 2003, new threats to the survival of soldiers emerged. The Coalition Forces Land Component Command (CFLCC) requested a solution to this problem, and the TASER M26 emerged at the top of the solution set. In less than 7 days, an urgentneeds letter was forwarded to the Department of the Army Assistant Chief of Staff (G3), where it was validated and forwarded to the Project Manager for Close Combat Systems for action. In March, April, and May, the instructor team from the Nonlethal Center of Excellence at Fort Leonard Wood, Missouri, was trained on weapon use by personnel from TASER International. Subsequent modifications to the program of instruction enabled the mobile training team to provide soldier instruction anywhere in Iraq. Concurrent with instructor training, safety testing was conducted at Aberdeen Test Center at Aberdeen Proving Ground, Maryland, where the weapon was deemed reliable and safe for use under combat conditions. Additionally, an analysis by the Human Effects Center of Excellence at Brooks Air Force Base, Texas, provided medical data recommendations supporting the weapon's safe employment.

Certification and Safety Procedures

With all of the essential elements in place, the mobile training team entered Iraq on 26 June



Soldiers from 82d Airborne Division practice firing the TASER M26.

and began fielding the TASER M26 to military police units guarding enemy prisoners of war. The team presented a 4-hour block of instruction, which covered the theory, operation, health effects, and required marksmanship skills of the weapon.

In the final block of instruction, soldiers experience the effects of the TASER M26 in a controlled environment. This experience proved to be a vital training tool; an operator is less likely to abuse the TASER M26 when he or she has experienced its effects. In the test, the soldier was placed in the kneeling position, with a soldier on each side serving as spotters, each holding a wrist and upper arm. The instructor then connected two alligator clips, one on the belt and one on the shirt collar. The alligator clips were attached to insulated wires that connected to the air-cartridge port of the TASER M26. The instructor asked the student if he was ready and then disengaged the safety, delivering a 1.5-second electrical charge from a 5-second cycle. While the soldier was "tased," he was spotted by the two soldiers to prevent injury from falling. As an additional precaution, two side-by-side sleeping mats were placed under the soldier. This method proved to be much safer than tasing the soldier from a standing position.

TASER M26 training places great emphasis on having a premeditated plan before the trigger is pulled. One of the critical blocks of instruction is apprehending a tased subject. A team of officers must rapidly handcuff a subject, while avoiding the probes and insulating wires that carry the current. The TASER M26 operator must always be ready to administer another 5-second cycle when needed. Soldiers are taught to remove the barbed probes by making a

half-moon with the thumb and forefinger around the area of the probe and quickly pulling it out with the other hand. This leaves minimal bruising and scarring, no more than a pinprick.

Use in a Combat Environment

From 26 June to 15 July, the mobile training team issued 44 TASER M26s to military police units throughout Iraq, with the basis of issue being six weapons per 200-man nonlethal capability set. The TASER M26 was a well-accepted alternative to oleoresin capsicum (OC) pepper spray and is the second step, after the verbal command, in the military police force continuum. The TASER M26 proved to be easy to train in varied environments from "butcher board" laminated charts in dusty tents, PowerPoint® slides off of a laptop computer, or state-of-the-art plasma screens in classrooms. Due to its similarity to the M9 pistol, TASER M26 operation was second nature to most military police in Iraq. In many cases, the weapon went out with soldiers on patrol immediately after issue.

The TASER M26 received its best reception in enemy prisoner of war camps where prisoner and military police injuries were greatly reduced by its presence.

Future Military Police Operations

The fielding of the TASER M26 has introduced an advanced capability to military police in combat operations. A formal Capability Development Document is being developed at the U.S. Army Military Police School to ensure the inclusion of the TASER M26 in the nonlethal capability set. An advanced version of the TASER M26 has been fielded to civilian law enforcement and is under consideration by the Army. The TASER X26 is 60 percent smaller and is exponentially more effective, using shaped-pulse technology. A rail interface device has been developed to attach the TASER X26 beneath the barrel of the M4 Carbine. The TASER M26 and the reversible electromuscular disruption that it creates represent the most effective incapacitant available. It fulfills the Native American motto of "it is better to have lightning in the hand than thunder in the mouth."